THE PROBLEMS OF CHEMICAL TERRORISM

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ABSTRACT

The use of sarin in the terrorist acts in Matsumoto city and the Tokyo underground attracted the attention of the scientific society to the chemical weapons (CW). But release of chemical materials from industrial sites poses also hazard and risks to military forces, emergency response person and citizens alike. There will be problems in detection and protection of chemical agents. Military forces are trained and equipped to survive and operate in toxic chemical environment. It is important to determine the capabilities of military and civil emergency personnel and units to respond to chemical terrorism in terms of existing equipment, skills, organization and procedures. The military medical corps of Balkan countries can discuss the possibility to help each other in the case of chemical terrorist acts. It is possible to be created Balkan Pharmaceutical Stockpile program including chemical antidotes and life support medications and equipment.

INTRODUCTION

The recent use of sarin in the terrorist acts in Matsumoto city and Tokio underground was considered by a number of specialists like a new era in terrorism. It removed any doubts about the possibility of using chemical weapons by terrorists.
Today it is clear that terrorism can be not only a state policy, but can also be realized by separate individuals, groups or organizations.

In addition to chemical weapons, terrorists can use different toxic chemicals from chemical industry, agriculture or products released from terrorist acts on industrial facilities. Some specialists include different toxins in this group of terrorist agents.

DISCUSSION

Chemical weapons have a number of advantages that make them a priority among terrorist agents:

- relatively easy and cheap production;
- available and easy to access precursors of chemical weapons, which are routinely used in industry and in life;
- precursors and toxic chemicals are easy to carry and transport becauses of difficulties to monitor and control their movement;
- resulting damages are considerable in amount and content
- their fast effect requires emergency response which makes difficult the rescue operation;
- their psychological impact will extend far beyond the actual size of damage or number of casualties in time.
- the arsenal of chemical agents that can be used like terrorist agents is practically unlimited.

-Chemical agents that might be used by terrorist:

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-chemical weapons that are already known;

-chemical agents, which may be used as chemical weapons with the help of a new technology;

-unknown chemical agent, which may be used as chemical weapons;

-chemical agent, which cause public panic and social disruption;

-chemicals commonly used in the industry [2,5];

-pesticides;

-toxins;

-chemicals, which may be obtained after explosion, fire and other incidents in industry or transportation of chemicals.

The response system in case of chemical terrorist acts is a problem of all state institutions [3,6].

THE ROLE OF THE CIVILIAN INSTITUTIONS IN FIGHT WITH CHEMICAL TERRORISM

With regard to this the civilian institutions have some advantages (for example in Bulgaria [1]):

-well organized civil defense;

-identification and classification of dangerous substances and chemical facilities;

-documentation of industrial processes and products;

-development of risk maps;

-environmental monitoring;

-well organized health system (sufficient number of hospitals, physicians and pharmacists);

-development of environmental protection in line with the EU criteria;

-developed communication system;

-experience in studying and producing antidotes and individual protective equipment.

In some countries civilian institutions have disadvantages:

-lack of stockpiling of antidotes and other life-saving aids;

-less teaching and training activity/programs for fight against chemical terrorism at all levels and structures of society (including physicians);

-lack of identification and designation of specific hospitals and alternative health care facilities for managing of large number of patients after chemical terrorist acts.

THE ROLE OF THE ARMY IN FIGHT WITH CHEMICAL TERRORISM

The issue of chemical terrorism has direct relevance for the army. On one side, a military unit can be the target of a terrorist act. On the other, as practical experience shows, army units and the army medical corps are involved and take active part in coping with industrial accidents and natural disasters and the management of their consequences.

The army in general is in a better position than civilians to act in chemical counter-terrorist operations for the following advantages: the higher level of training, availability of chemical defense equipment, antidotes, and devices for indication and decontamination. The problem is, however, that all this potential and readiness is prepared for effective use in conditions of chemical warfare.

The question arises whether the army units involved have prior developed actions plans in case of chemical terrorist acts and attacks either on them or in the vicinity of their dislocation. Such plans for the army should be an integral element in the government counter-terrorist policies and politics of each state.

According to the conclusions reached by a panel of international experts, many countries still lack an overall concept and vision of the army’s participation in fighting and eliminating the outcome of chemical terrorism.

Within the overall counter-terrorist coordination among different state agencies and units, the planning and preparation of the army units and their medical services should be focused on the following specific points:

-risk assessment for the use of chemical agents as terrorist agents with particular attention to toxic industrial chemicals and toxins.

-update assessment of the effective toxic levels that should cover both the known chemical weapons in view of the modern technologies of their use and toxic compounds and chemicals of industrial origin.

-assessment of the available capability and contemporary technological devices for the detection and identification of a broad range of chemical compounds.

-modernization and optimization of individual protection with particular focus on respiratory protection and protective clothing.

-inventory and assessment of the available means for medical treatment of chemical intoxications. Assessment of the required amounts and types of antidotes (in view of the broader range of potentially toxic agents) and their update with development and introduction of new compounds.

-assessment of the available means for indication and control of chemical contamination and the effectiveness of decontamination. This should consider the broader range of potentially toxic agents and the available state-of-the-art technologies.

Personnel training acquires particular significance in the preparation of the army and its medical corps to counteract chemical terrorism. It should incorporate and implement the latest achievements of computer simulation and virtual reality technologies.

The experience of other countries (e.g.: Czech Republic [4]) shows that the military medical teaching and research communities can play a considerable role in raising public awareness and preparing the population and civic organizations for the fight against chemical terrorism.

The effective preparation of the army for action in chemical and other terrorist attacks is an expensive and long-lasting continuous process that can be improved and made more productive with the joint coordinated efforts of all Balkan countries. There are a number of opportunities and unused potential in that respect:

-coordination of resource utilization and trans border mutual aid in terrorist acts near the borders of neighboring countries.

-use of available special military medical units in emergency situations;

-common stockpiling of antidotes and other life-saving aids [7].

-unified notification and information system for the applied primary medical treatment.

-effective triage and transport to the nearest specialized medical facility.

-joint exercises of the medical corps of the fellow countries in managing and eliminating the consequences of chemical terrorism.

CONCLUSION

The main topic of organization of the fight with chemical terrorism is to draw up common state plan.

The basic aspects of the common state plan for the fight against chemical terrorism are :

-participation of all State institutions;

-regional/international cooperation.

The main topics of this plan are:

-protection of human life from damages caused from chemical agents after chemical terrorist acts;

-defense against losses on the environment;

-preventing material losses.

In view of further promoting regional cooperation, it would be proposed that would be set up Special Task Force of experts of medical corps of armies and civilian institutions to develop and prepare a joint document of common measures and actions in case of chemical and other terrorist acts in the Balkan regions.

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